



SFUND RECORDS CTR
2380785

ICF international / Laboratory Data Consultants

Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

MEMORANDUM

TO: Matt Mitguard, Site Manager
Brownfields and Site Assessment Section, SFD-6-1

THROUGH: Rose Fong, ESAT Task Order Manager (TOM) RF
Quality Assurance (QA) Program, MTS-3

FROM: Doug Lindelof, Data Review Task Manager DL
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041
Technical Direction Form No.: 00405122

DATE: May 6, 2010

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:	Tujunga Stage 2 SI
Site Account No.:	09 RP QB00
CERCLIS ID NO.:	CAN000908605
Case No.:	39591
SDG No.:	Y64M7
Laboratory:	TestAmerica Burlington (STLV)
Analysis:	Trace and Low Volatiles
Samples:	4 Soil Samples and 2 Equipment Blanks (see Case Summary)
Collection Date:	March 26 and 30, 2010
Reviewer:	Santiago Lee, ESAT/Laboratory Data Consultants (LDC)

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc: Jennie Han-Liu, CLP PO USEPA Region 1
Steve Remaley, CLP PO USEPA Region 9

CLP PO: ☒ Attention ☒ Action

SAMPLING ISSUES: ☒ Yes ☐ No

00405122-12176/39591/Y64M7-TLV

00405122-12176/39591/Y64M7-TLV

Data Validation Report - Tier 3

Case No.: 39591
SDG No.: Y61M7
Site: Tujunga Stage 2 SI
Laboratory: TestAmerica Burlington (STLV)
Reviewer: Santiago Lee, ESAT/LDC
Date: May 6, 2010

I. CASE SUMMARY

Sample Information

Samples: Y64M7 and Y64M8; Y64N3 through Y64N6
Concentration and Matrix: Low Concentration Water and Soil
Analysis: Trace and Low Volatiles
SOW: SOM01.2
Collection Date: March 26 and 30, 2010
Sample Receipt Date: March 27 and 31, 2010
Extraction Date: Not Applicable
Analysis Date: March 29, 2010 and April 1, 2010

Field QC

Field Blanks (FB): Not provided
Equipment Blanks (EB): Y64M7 and Y64M8
Trip Blanks (TB): Not provided
Background Samples (BG): Not provided
Field Duplicates (D1): Not provided

Laboratory QC

Method Blanks & Associated Samples:
VBLKJX: Y64M7 and Y64M8
VBLKJI: Storage blank VHBLK01
VBLKNS: Y64N3 through Y64N6, Y64N3RE, Y64N4RE,
Y64N6RE
VBLKNU: Storage blank VHBLK02

Tables

- 1A: Analytical Results with Qualifications
- 1B: Data Qualifier Definitions for Organic Data Review
- 2: Calibration Summary

CLP PO Action

Nondetected results for 1,4-dioxane in all soil samples, method blanks VBLKNS and VBLKNU, and storage blank VHBLK02 are qualified as rejected (R) due to very low relative response factors (RRFs <0.01) in the 03/27/10 initial calibration and continuing calibration verifications (CCVs) (see Comment A).

CLP PO Attention

1. Results for some analytes are qualified as estimated (J) due to calibration problems (see Comments D and E).
2. Results for some analytes in soil samples Y64N3, Y64N4, and Y64N6 are qualified as estimated (J) due to low internal standard (IS) areas (see Comment F).

Sampling Issues

1. Soil samples Y64N3 through Y64N6 were received by the laboratory with a cooler temperature of 9.8°C which exceeds the 4±2°C sample preservation criterion. Since the cooler temperature is below 10°C, no adverse effect on data quality is expected.
2. The sampler signature is missing on traffic report and chain of custody records (TR/COCs) (refer to pages 9 and 10 in the data package).
3. The laboratory indicated in the SDG Narrative that one of the three VOA vials for equipment blank Y64M8 was received broken. The other two VOA vials were received frozen and with headspace about ¼ of an inch (refer to page 1.2 in the data package). Results for equipment blank Y64M8 may be biased low.
4. The laboratory indicated on ^{the} sample log-in sheet that the cooler temperature indicator bottle was absent from the cooler containing equipment blanks Y64M7 and Y64M8 (refer to page 423 in the data package).
5. Equipment blanks were not submitted “blind” to the laboratory since the matrix was stated as “Field QC” on TR/COCs (refer to page 9 in the data package).

Additional Comments

Recoveries for DMCs chloroethane-d5 in sample Y64N3 (135%), benzene-d6 in samples Y64N3 (142%) and Y64N4 (149%), 1,2-dichloropropane-d6 in samples Y64N3 (137%) and Y64N4 (149%), toluene-d8 in samples Y64N3 (125%) and Y64N4 (138%), trans-1,3-dichloropropene-d4 in samples Y64N3 (136%) and Y64N4 (146%), and 1,2-dichlorobenzene-d4 in sample Y64N4 (134%) exceeded QC limits; associated sample results were not qualified because they were nondetects.

No sample was designated for “laboratory QC” on the traffic report and chain of custody records. The SDG Narrative indicated that the laboratory received insufficient volume to perform MS/MSD analysis for soil samples (refer to page 1.2 in the data package.)

Other than laboratory artifacts (approximate retention times of 10.8, 18.3, and 20.3 minutes), tentatively identified compounds (TICs) were not found in soil samples.

The laboratory performed manual integrations on calibrations and samples due to incorrect auto integration. Manual integrations were reviewed and found to be satisfactory and in compliance with proper integration techniques.

This report was prepared in accordance with the following documents:

- ESAT Region 9 Standard Operating Procedure 901, *Guidelines for Data Review of Contract Laboratory Program Analytical Services Volatile and Semivolatile Data Packages*;
- USEPA Contract Laboratory Program Statement of Work for Organics Analysis, Multi-Media, Multi-Concentration, SOM01.1, May 2005;
- Modifications Updating SOM01.1 to SOM01.2, Amended April 11, 2007; and
- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, June 2008.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

<u>Parameter</u>	<u>Acceptable</u>	<u>Comment</u>
1. Holding Time/Preservation	Yes	
2. GC/MS Tune/GC Performance	Yes	
3. Initial Calibration	No	A, D
4. Continuing Calibration Verification	No	A, D, E
5. Laboratory Blanks	No	C
6. Field Blanks	N/A	
7. Deuterated Monitoring Compounds	Yes	
8. Matrix Spike/Matrix Spike Duplicate	N/A	
9. Laboratory Control Sample/Duplicate	N/A	
10. Internal Standards	No	F
11. Compound Identification	Yes	
12. Compound Quantitation	Yes	B
13. System Performance	Yes	
14. Field Duplicate Sample Analysis	N/A	

N/A = Not Applicable

III. VALIDITY AND COMMENTS

A. Nondetected results for the following analyte are qualified as rejected due to very low RRFs in initial calibration and CCVs and are flagged "R" in Table 1A.

- 1,4-Dioxane in all soil samples, method blanks VBLKNS and VBLKNU, and storage blank VHBLK02

RRFs below 0.01 were reported for 1,4-dioxane in the 03/27/10 initial calibration and CCVs (see Table 2). The DMC 1,4-dioxane-d8 also had RRF values below 0.01 in the 03/27/10 initial calibration and CCVs (see Table 2).

The RRF evaluates instrument sensitivity and is used in the quantitation of target analytes.

- B. The following results, denoted with an "L" qualifier, are estimated and flagged "J" in Table 1A.

- All detected results below the contract required quantitation limits

Results below the contract required quantitation limits (CRQLs) are considered to be qualitatively acceptable, but quantitatively unreliable, due to the uncertainty in analytical precision near the limit of detection.

- C. The following result is qualified as nondetected and estimated due to method blank contamination and is flagged "U,J" in Table 1A.

- Acetone in storage blank VHBLK01

Acetone was found in method blank VBLKJI at 2.6 ug/L. The result listed above is considered nondetected and estimated (U,J) and the quantitation limit has been raised according to the blank qualification rules presented below.

No positive results are reported unless the concentration of the compound in the sample exceeds 10 times the amount in any associated blank for common laboratory contaminants or 5 times the amount for other compounds. If the sample result is greater than the CRQL, the quantitation limit is raised to the sample result and reported as nondetected. If the sample result is less than the CRQL, the result is reported as nondetected at the CRQL.

A laboratory method blank is laboratory reagent water or baked sand analyzed with all reagents, deuterated monitoring compounds, and internal standards and carried through the same sample preparation and analytical procedures as the field samples. The laboratory method blank is used to determine the level of contamination introduced by the laboratory during analysis.

- D. Results for the following analytes are qualified as estimated due to low RRFs in initial calibrations and CCVs and are flagged "J" in Table 1A.

- Acetone, butanone, and 1,2-dibromo-3-chloropropane in equipment blanks Y61M7 and Y61M8, method blanks VBLKJI and VBLKJX, and storage blank VHBLK01
- Methyl acetate in method blank VBLKJI and storage blank VHBLK01

RRFs were below the 0.05 validation criterion for acetone and 2-butanone in 03/25/10 and 04/05/10 initial calibrations and for acetone, butanone, and 1,2-dibromo-3-chloropropane in CCVs (see Table 2). RRFs of 0.049 for methyl acetate

ANALYTICAL RESULTS

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Table 1A

Case No. : 39591

SDG No. : Y64M7

Site : TUJUNGA Stage 2 SI

Lab : TAL Burlington

Reviewer : Santiago Lee, ESAT/LDC

Date : 05/06/10

QUALIFIED DATA

Concentration in ug/Kg (Dry Weight)

Analysis Type :

Low Level Soil Samples
for Volatiles

Station Location :	BSB-20-01			BSB-20-02			BSB-21-01			BSB-21-02			Method Blank			Method Blank		
Sample ID :	Y64N3			Y64N4			Y64N5			Y64N6			VBLKNS			VBLKNU		
Collection Date :	3/30/2010			3/30/2010			3/30/2010			3/30/2010			1.0			1.0		
Dilution Factor :	1.0			1.0			1.0			1.0			1.0			1.0		
Volatiles	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com
Dichlorodifluoromethane	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U		
Chloromethane	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U		
Vinyl Chloride	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U		
Bromomethane	5.8U	J	E	5.5U	J	E	5.6U	J	E	6.1U	J	E	5.0U	J	E	5.0U	J	E
Chloroethane	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U		
Trichlorofluoromethane	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U		
1,1-Dichloroethene	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U		
1,1,2-Trichloro-1,2,2-trifluoroethane	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U		
Acetone	120			86			27			59			10U			10U		
Carbon Disulfide	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U		
Methyl Acetate	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U		
Methylene Chloride	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U		
trans-1,2-Dichloroethene	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U		
Methyl tert-Butyl Ether	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U		
1,1-Dichloroethane	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U		
cis-1,2-Dichloroethene	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U		
2-Butanone	41			30			9.6L	J	B	19			10U			10U		
Bromochloromethane	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U		
Chloroform	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U		
1,1,1-Trichloroethane	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U		
Cyclohexane	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U		
Carbon Tetrachloride	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U		
Benzene	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U		
1,2-Dichloroethane	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U		
1,4-Dioxane	120U	R	A	110U	R	A	110U	R	A	120U	R	A	100U	R	A	100U	R	A
Trichloroethene	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U		

ANALYTICAL RESULTS

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Case No. : 39591

SDG No. : Y64M7

Table 1A

Site : TUJUNGA Stage 2 SI

Lab : TAL Burlington

Reviewer : Santiago Lee, ESAT/LDC

Date : 05/06/10

QUALIFIED DATA
Concentration in ug/Kg (Dry Weight)

Analysis Type :

Low Level Soil Samples
for Volatiles

Station Location : BSB-20-01				BSB-20-02				BSB-21-01				BSB-21-02				Method Blank				Method Blank			
Sample ID : Y64N3				Y64N4				Y64N5				Y64N6				VBLKNS				VBLKNU			
Collection Date : 3/30/2010				3/30/2010				3/30/2010				3/30/2010				1.0				1.0			
Dilution Factor : 1.0				1.0				1.0				1.0				1.0				1.0			
Volatiles	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com					
Methylcyclohexane	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U							
1,2-Dichloropropane	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U							
Bromodichloromethane	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U							
cis-1,3-Dichloropropene	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U							
4-Methyl-2-Pentanone	12U			11U			11U			12U			10U			10U							
Toluene	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U							
trans-1,3-Dichloropropene	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U							
1,1,2-Trichloroethane	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U							
Tetrachloroethene	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U							
2-Hexanone	12U			11U			11U			12U			10U			10U							
Dibromochloromethane	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U							
1,2-Dibromoethane	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U							
Chlorobenzene	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U							
Ethylbenzene	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U							
o-Xylene	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U							
m,p-Xylene	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U							
Styrene	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U							
Bromoform	5.8U	J	F	5.5U	J	F	5.6U			6.1U	J	F	5.0U			5.0U							
Isopropylbenzene	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U							
1,1,2,2-Tetrachloroethane	5.8U			5.5U			5.6U			6.1U			5.0U			5.0U							
1,3-Dichlorobenzene	5.8U	J	F	5.5U	J	F	5.6U			6.1U	J	F	5.0U			5.0U							
1,4-Dichlorobenzene	5.8U	J	F	5.5U	J	F	5.6U			6.1U	J	F	5.0U			5.0U							
1,2-Dichlorobenzene	5.8U	J	F	5.5U	J	F	5.6U			6.1U	J	F	5.0U			5.0U							
1,2-Dibromo-3-chloropropane	5.8U	J	F	5.5U	J	F	5.6U			6.1U	J	F	5.0U			5.0U							
1,2,4-Trichlorobenzene	5.8U	J	F	5.5U	J	F	5.6U			6.1U	J	F	5.0U			5.0U							
1,2,3-Trichlorobenzene	5.8U	J	F	5.5U	J	F	5.6U			6.1U	J	F	5.0U			5.0U							
Percent Solids	82%			79%			81%			79%			NA			NA							

Val - Validity. Refer to Data Qualifiers in Table 1B.

Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.

CRQL - Contract Required Quantitation Limit

N/A - Not Applicable

NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs

FB - Field Blank, EB - Equipment Blank,

TB - Trip Blank, BG - Background Sample

Table 1A

Case No. : 39591

Site : TUJUNGA Stage 2 SI

Lab : TAL Burlington

Reviewer : Santiago Lee, ESAT/LDC

Date : 05/06/10

QUALIFIED DATA

Concentration in ug/Kg (Dry Weight)

Analysis Type :

Low Level Soil Samples for Volatiles

[illegible]

ANALYTICAL RESULTS

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Case No. : 39591

SDG No. : Y64M7

Table 1A

Site : TUJUNGA Stage 2 SI

Lab : TAL Burlington

Reviewer : Santiago Lee, ESAT/LDC

Date : 05/06/10

QUALIFIED DATA
Concentration in ug/Kg (Dry Weight)

Analysis Type :

Low Level Soil Samples
for Volatiles

Station Location :	Storage Blank			CRQL														
Sample ID :	VHBLK02																	
Collection Date :																		
Dilution Factor :	1.0																	
Volatiles	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com
Methylcyclohexane	5.0U			5.0														
1,2-Dichloropropane	5.0U			5.0														
Bromodichloromethane	5.0U			5.0														
cis-1,3-Dichloropropene	5.0U			5.0														
4-Methyl-2-Pentanone	10U			10														
Toluene	5.0U			5.0														
trans-1,3-Dichloropropene	5.0U			5.0														
1,1,2-Trichloroethane	5.0U			5.0														
Tetrachloroethene	5.0U			5.0														
2-Hexanone	10U			10														
Dibromochloromethane	5.0U			5.0														
1,2-Dibromoethane	5.0U			5.0														
Chlorobenzene	5.0U			5.0														
Ethylbenzene	5.0U			5.0														
o-Xylene	5.0U			5.0														
m,p-Xylene	5.0U			5.0														
Styrene	5.0U			5.0														
Bromoform	5.0U			5.0														
Isopropylbenzene	5.0U			5.0														
1,1,2,2-Tetrachloroethane	5.0U			5.0														
1,3-Dichlorobenzene	5.0U			5.0														
1,4-Dichlorobenzene	5.0U			5.0														
1,2-Dichlorobenzene	5.0U			5.0														
1,2-Dibromo-3-chloropropane	5.0U			5.0														
1,2,4-Trichlorobenzene	5.0U			5.0														
1,2,3-Trichlorobenzene	5.0U			5.0														
Percent Solids	NA			NA														

Val - Validity. Refer to Data Qualifiers in Table 1B.

Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.

CRQL - Contract Required Quantitation Limit

N/A - Not Applicable

NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs

FB - Field Blank, EB - Equipment Blank,

TB - Trip Blank, BG - Background Sample

SDG No. : Y64M7

Table 1A

Analysis Type :

Trace Level Water Samples for Trace Volatiles

Date : 05/06/10

QUALIFIED DATA
Concentration in ug/L

[illegible]

ANALYTICAL RESULTS

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Table 1A

Case No. : 39591

SDG No. : Y64M7

Site : TUJUNGA Stage 2 SI

Lab : TAL Burlington

Reviewer : Santiago Lee, ESAT/LDC

Date : 05/06/10

QUALIFIED DATA
Concentration in ug/L

Analysis Type :

Trace Level Water Samples
for Trace Volatiles

Station Location : BSB-19-3				BSB-19-4			Method Blank			Method Blank			Storage Blank			CRQL		
Sample ID : Y64M7				Y64M8			VBLKJI			VBLKJX			VHBLK01					
Collection Date : 3/26/2010				3/26/2010			1.0			1.0			1.0					
Dilution Factor.: 1.0				1.0														
Trace Volatiles	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com	Result	Val	Com
1,2-Dichloropropane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50		
Bromodichloromethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50		
cis-1,3-Dichloropropene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50		
4-Methyl-2-Pentanone	5.0U			5.0U			5.0U			5.0U			5.0U			5.0		
Toluene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50		
trans-1,3-Dichloropropene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50		
1,1,2-Trichloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50		
Tetrachloroethene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50		
2-Hexanone	5.0U			5.0U			5.0U			5.0U			5.0U			5.0		
Dibromochloromethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50		
1,2-Dibromoethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50		
Chlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50		
Ethylbenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50		
o-Xylene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50		
m,p-Xylene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50		
Styrene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50		
Bromoform	0.50U			0.50U			0.50U			0.50U			0.50U			0.50		
Isopropylbenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50		
1,1,2,2-Tetrachloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50		
1,3-Dichlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50		
1,4-Dichlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50		
1,2-Dichlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50		
1,2-Dibromo-3-chloropropane	0.50U	J	D	0.50U	J	D	0.50U	J	D	0.50U	J	D	0.50U	J	D	0.50		
1,2,4-Trichlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50		
1,2,3-Trichlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50		

Val - Validity. Refer to Data Qualifiers in Table 1B.

Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.

CRQL - Contract Required Quantitation Limit

N/A - Not Applicable

NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs

FB - Field Blank, EB - Equipment Blank,

TB - Trip Blank, BG - Background Sample

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR ORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared according to the document, "USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review," June 2008.

- U The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted Contract Required Quantitation Limit (CRQL) for sample and method.
- L Indicates results which fall below the Contract Required Quantitation Limit. Results are estimated and are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of detection.
- J The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL).
- NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- UJ The analyte was not detected at a level greater than or equal to the adjusted CRQL. However, the reported adjusted CRQL is approximate and may be inaccurate or imprecise.
- R The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.

Table 2
Calibration Summary

Case No.: 39591
SDG No.: Y61M7
Site: Tujunga SI
Laboratory: TestAmerica Burlington
Reviewer: Santiago Lee, ESAT/LDC
Date: May 4, 2010

RELATIVE RESPONSE FACTORS (RRFs)

	<u>RRF</u>	<u>RRF</u>	<u>RRF</u>	<u>RRF</u>	<u>RRF</u>
Analysis date:	03/27/10	04/01/10	04/01/10	04/05/10	04/05/10
Analysis time:	13:15-	08:48	17:18	11:28	17:44
GC/MS I.D.:	Ni	Ni	Ni	Ni	Ni
<u>Analyte</u>	<u>Initial</u>	<u>CCV</u>	<u>CCV</u>	<u>CCV</u>	<u>CCV</u>
1,4-Dioxane	0.003	0.003	0.003	0.003	0.003
1,4-Dioxane-d8	0.003	0.003	0.003	0.003	0.003

	<u>RRF</u>	<u>RRF</u>	<u>RRF</u>
Analysis date:	03/25/10	03/29/10	03/29/10
Analysis time:	19:46-	10:17	19:15
GC/MS I.D.:	Ji	Ji	Ji
<u>Analyte</u>	<u>Initial</u>	<u>CCV</u>	<u>CCV</u>
Acetone	0.023	0.022	0.023
2-Butanone	0.042	0.042	0.042
1,2-Dibromo-3-chloropropane	-----	-----	0.043
2-Butanone-d5	0.042	0.043	0.047
2-Hexanone-d5	0.041	0.042	0.040

	<u>RRF</u>	<u>RRF</u>	<u>RRF</u>
Analysis date:	04/05/10	04/06/10	04/06/10
Analysis time:	13:18-	08:11	09:53
GC/MS I.D.:	Ji	Ji	Ji
<u>Analyte</u>	<u>Initial</u>	<u>CCV</u>	<u>CCV</u>
Acetone	0.014	0.012	0.012
2-Butanone	0.028	0.024	0.026
1,2-Dibromo-3-chloropropane	-----	0.040	0.039
2-Butanone-d5	0.027	0.024	0.025
2-Hexanone-d5	0.033	0.029	0.030